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No. 04-1350

Supreme Court, U.S.
FILED
AUG 2 2 2006
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IN THE

Supreme Court of the United States

KSR INTERNATIONAL CO.,

Petitioner,

v.

TELEFLEX INC. and
TECHNOLOGY HOLDING CO.,

Respondents.

ON WRIT OF CERTIORARI TO THE
UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

BRIEF OF *AMICUS CURIAE* ELECTRONIC FRONTIER FOUNDATION IN SUPPORT OF PETITIONER

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STATEMENT OF INTEREST OF AMICUS

Electronic Frontier Foundation (EFF) is a non-profit, membership-supported civil liberties organization working to protect consumer interests, innovation and free expression in the digital world. EFF and its over 11,000 dues-paying members have a strong interest in assisting the courts and policy-makers in striking the appropriate balance between intellectual property and the public interest. The Federal Circuit's "Suggestion To Combine" test undermines the traditional patent bargain between private patentees and the public and threatens to impede innovation and the dissemination of knowledge, both issues of critical importance to consumers and the principle purposes behind patent law. As an established advocate of consumer interests and digital rights, EFF has a perspective to share that is not represented by the parties to this appeal, neither of whom speaks directly for the interests of consumers or the public interest generally.

Both parties have consented to the filing of this brief.[1]

SUMMARY OF ARGUMENT

The Federal Circuit Court of Appeals has lost sight of the purpose of patents and the mandates of this Court. Properly understood, a patent is a distinct statutorily-created and limited set of rights, designed solely to encourage inventors to disclose their inventions to the public, thereby promoting scientific and industrial progress. Illegitimate patents inhibit that progress, the sharing of knowledge and

1. Per Rule 37.6, amicus states that no counsel for any party has participated, in whole or in part, in writing or financing this brief. Both parties have consented to the filing of this brief and copies of their letters of consent have been filed with the court.

the pace of innovation. Careful scrutiny of whether or not a purported invention is obvious in light of the prior art helps ensure that this extraordinary grant is reserved for significant developments and does not chill innovation by rewarding applicants claiming trivial and self-evident add-ons with exclusive control over those features.

The heart of the error in the decision below is the Federal Circuit's "suggestion test," which asks judges to limit this scrutiny and leave their brains at the courthouse door. In the name of preventing hindsight bias, the court below has denied judges the ability to use common sense and rationality to determine the weight of the obviousness evidence before them. What is worse, it has forced litigants to search through haystack upon haystack of technical knowledge for the exact needle in which someone, somewhere, bothers to state the obvious. Such endeavors are not only inefficient and burdensome but, as many commentators and practitioners in the field have written, are contrary to the principles, policies, and standards this Court has announced.

The damage caused by the Federal Circuit's "suggestion test" goes beyond the litigation context. In addition to tying the hands of judges and juries, the test also binds the discretion of examiners at the U.S. Patent and Trademark Office ("PTO"). Prohibited from rejecting outright obvious patents based on their personal scientific knowledge and judgment, these public servants have been forced to approve a massive surge in patenting, especially in software and biotechnology. Federal Trade Commission, *To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy* ("FTC Report") Chap .4, at 12 (2003). In particular, the so-called "patent trolls" have realized that, with the nonobviousness standard artificially low, the

probability of gaining approval for a patent on an obvious innovation is quite high, especially since it is the PTO examiner who bears the burden of finding the specific "suggestion" document, not the patent applicant. Manual of Patent Examining Procedure (MPEP) § 2142 (Legal Concept of Prima Facie Obviousness); *see also In re Rinehart*, 531 F.2d 1048, 189 U.S.P.Q. 143 (CCPA 1976); *In re Linter*, 458 F.2d 1013, 173 U.S.P.Q. 560 (CCPA 1972); *In re Saunders*, 444 F.2d 599, 170 U.S.P.Q. 213 (CCPA 1971). When these bogus patents issue, they quickly lend themselves to use as weapons against legitimate innovators instead of the properly applied exclusionary grants they were intended to be.

In the case of Free and Open Source Software ("FOSS") projects, the suggestion test has especially pernicious effects. FOSS is a relatively new phenomenon in the software world. Started several decades ago by a few core groups of programmers, it has now blossomed into a multi-billion-dollar segment of the information technology industry, with companies such as IBM, Novell, Sun Microsystems, and Red Hat offering products built on the FOSS development process.

In FOSS projects, software develops openly and transparently. The conversations, the computer code, and each stage of development are accessible and open to the public, maximizing access to scientific and industrial knowledge in the community and spurring further productivity and innovation. In addition, most FOSS collaborations involve contributors from a wide variety of companies, groups, and countries, many of whom volunteer their time and ingenuity out of passion and dedication instead of financial reward.

And therein lies the rub. Because these collaborations are forged primarily through community rather than capital investment, many FOSS projects lack the funding to pay for patent counsel, much less litigation. Thus, the normal costs of doing business in the patent-laden world of information technology – opinion letters, litigation, etc. – are exponentially detrimental for FOSS.

Instead, FOSS projects rely on two main resources to deal with intellectual property problems: specialized copyright licenses and collective knowledge. Through their specialized copyright licenses, FOSS projects can ensure that the transaction costs of sharing code are low and that copyright litigation is rare. To fend off patents threats, however, FOSS projects often depend on the collective knowledge of their members and the documentation of the projects as prior art, to the extent that such documentation exists.

Much of this collective knowledge, however, cannot be considered as evidence of obviousness under the Federal Circuit's suggestion test because it is not explicitly documented in the limited way recognized by the court below, despite clearly meeting the standards laid out by the plain language of Section 103 of the Patent Act. For example, consider a situation where there is an email dialogue between two software programmers to solve a single problem. In the course of their dialogue, they discuss the problem and develop a solution. However, because time is of the essence and their dialogue is informal and ongoing, they fail to explicit suggest all the various and obvious ways the solution could be used to solve other problems. Even though both programmers could testify (under *Graham*) to these obvious additional uses against a patent that claimed them, they would be prohibited from doing so under the Federal Circuit's suggestion test.

EFF files this brief to respectfully request that this Court reject the Federal Circuit's suggestion test and fully embrace the proper scope of Section 103 so that FOSS projects may continue to grow and contribute to our nation's information economy without the chilling effect of bogus patent threats.

BACKGROUND FACTS

Overview of FOSS

The particular negative consequences of the Federal Circuit's suggestion test for the FOSS industry flow from the nature of FOSS development and distribution. FOSS programs are distributed with both their "object" computer code and "source" computer code included. "Source code" is a combination of word-based commands that engineers use to write software, similar to a recipe that a chef might write. That code is then translated by computers into "object code," a series of ones and zeros that tell the computer's components what to do and how to function.

Traditionally, commercial software companies distribute their product in object code form only. In other words, the software can tell their customers' computers what to do, but only the most advanced programmers will be able to discern precisely how those instructions are given and, therefore, be able to understand and change those instructions. To analogize to another commercial product, the customer buys the car but cannot look under the hood. FOSS developers, by contrast, distribute their software with the source code freely available so that recipients can easily understand, adapt, and hopefully improve the software. The software is often distributed under the terms of the General Public License, which requires, among other things, that modified

versions released to the public continue to make the source code available.[2]

FOSS began in the academic context, but has become an integral part of the software industry. For example, several critical internet and email technologies were developed in FOSS projects. Tim O'Reilly, *Open Source Paradigm Shift*, June 2004, http://tim.oreilly.com/articles/paradigmshift_0504.html (last visited Aug. 20, 2006). FOSS technologies are now widely used by public and private entities, from the United States federal government to private corporations such as IBM Corporation, Sun Microsystems, and Google, Inc. *See* Yochai Benkler, *The Wealth of Networks: How Social Production Transforms Markets and Freedom* 64 (2006). These entities recognize the myriad benefits of FOSS, including improved reliability and security (because the software is examined and tested by hundreds if not thousands of developers in a wide variety of contexts) and low cost. *Id.* at 46 (describing how IBM benefits from use of FOSS). Moreover, FOSS customers often benefit by avoiding "technology lock-in" – if they do not like one vendor's service, they can switch to another vendor without major changes to their technology infrastructure. Open Source Initiative, *The Open Source Case for Customers*, http://www.opensource.org/advocacy/case_for_customers.php (last visited Aug. 20, 2006).

Moreover, the public benefits from FOSS projects by the enrichment of a fund of knowledge embodied in the source code that anyone may examine, test and/or improve. Indeed, with respect to software development, this type of knowledge is

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2. Free Software Foundation, *GNU General Public License* (Version 2 June 1991), http://www.gnu.org/copyleft/gpl.html (last visited Aug. 20, 2006).

significantly more valuable than that disclosed in a patent because patents do not require disclosure of source code. FTC Report, *supra*, Chap. 3, at 56; G. Vetter, *The Collaborative Integrity of Open Source Software*, 2004 UTAH L.R. 563, 586 (2004) ("Source code makes the inner workings of a computer program directly observable. [Other] techniques are rarely as effective as access to the source code when one wants to leverage the work of another programmer.") (citation omitted). Therefore, the growth of FOSS should be welcomed and encouraged.

The FOSS Business Model

FOSS is usually distributed for free or at minimal cost. Private individuals and academics do some of this distribution, but for-profit FOSS companies are flourishing as well. Rather than selling proprietary software, for-profit FOSS companies generate revenue from ancillary services. For example, companies such as Red Hat make money from compiling software applications based on the GNU/Linux operating system. *Id.* at 616 (discussing FOSS projects).[3] They also charge for value-added services such as installation, consultation and support. *Id.* Companies such as IBM Corporation distribute web server software that includes the Apache web server, the most popular web server program in the world. *Id.*[4]

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3. Operating systems are themselves software programs that control the computer hardware. Software applications use operating systems as a platform to communicate between the computer hardware and the specific application.

4. IBM, IBM http Server: Features and Benefits, http://www-306.ibm.com/software/webservers/httpservers/features/index.html (last visited Aug, 18, 2006); Netcraft, August 2006 Web Server Survey, http://news.netcraft.com/archives/2006/08/01/august_2006_web_server_survey.html (last visited Aug. 18, 2006) (Apache occupies sixty three percent of web server market).

This Court has observed that a patent should be granted *only* if the invention would not be made or disclosed but for the economic incentive of patent protection. *Graham v. John Deere*, 383 U.S. 1, 11 (1966). FOSS software is generally made and disclosed without that economic incentive, thereby benefiting consumers and competitors alike without imposing the social costs of exclusive rights. Unfortunately, holders of bogus obvious patents, assisted by the Federal Circuit's improper test, may limit that growth by destroying the alternative economic incentives upon which FOSS companies rely.

Effect of Patents on FOSS Development; the Problem of Prior Art

The FOSS industry is "poised for rapid growth." Josh Lerner and Jean Tirole, *The Economics of Technology Sharing: Open Source and Beyond*, 19 JOURNAL OF ECONOMIC PERSPECTIVES 99, 100 (2005). To use just one metric, as of this writing software development support website SourceForge.net listed 127,055 open FOSS projects. *See* SourceForge.net, http://sourceforge.net/ (last visited Aug. 14, 2006).

Software patent litigation continually threatens to stifle that growth. As Lerner and Lirole note, the proliferation of software patents present special problems for the open source community. First, one of the major incentives behind use of FOSS is its low cost of use. *See* Business Week Online, *Open Source, Now It's an Ecosystem*, October 3, 2005, http://www.businessweek.com/technology/content/oct2005/tc2005103_0519_tc_218.htm (last visited Aug. 18, 2006). If companies that invest in using and building on FOSS must defend themselves against bogus patent threats, that cost

could skyrocket.[5] *See generally*, *Always On: Open Source and Patent Trolls*, http://blogs.zdnet.com/BTL/?p=3384 (last visited Aug. 20, 2006). Indeed, patent concerns have already slowed the adoption of Linux in the public sector. *See* Lerner and Tirole, *supra*, at 113; *see also generally* Yochai Benkler, *Coase's Penguin, or Linux and the Nature of the Firm*, 112 YALE L. J. 369, 445 (2002) ("Strong intellectual property rights, in particular rights to control creative utilization of existing information, harm peer production by raising the cost of access to existing information resources").

In order to keep these costs low in the realm of copyright, FOSS projects rely heavily on their specialized copyright licenses. These licenses, such as the GNU General Public License, provide standard terms to ensure that all users of the code abide by certain public interest principles, such as mandatory publication of the source code for any new improvement or modifications to the program. This keeps transaction costs extremely low for the FOSS community and litigation the exception rather than the rule.[6]

With patents, however, such licenses have yet to provide effective protection against bogus patent threats, especially from entities outside the FOSS community. Thus, in order

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5. The American Intellectual Property Law Association estimates that defense against a single software patent lawsuit can cost between two and five million dollars. American Intellectual Property Law Association, *AIPLA Report of Economic Survey* (2003).

6. In addition, because of the First Amendment and idea-expression limitation on copyright, copyright claims cannot prohibit the dissemination of scientific knowledge and learning in the FOSS community; instead, such claims can only limit specific implementations of code. *See generally* Vetter, *supra*, at 589, n. 69.

for the economics of FOSS to continue to function in the world of patents, there must be an efficient way for FOSS projects to protect and defend themselves without incurring substantial legal fees or high transaction costs. A rigorous and fair standard for obviousness serves that purpose.

Second, the nature of FOSS development, in particular the vast and growing trove of public knowledge it engenders, make it especially vulnerable to so-called "Patent Trolls" – companies that acquire questionable patents and assert them against others who either cannot afford to fully defend themselves or, when confronted with the prospect of damages, injunctions, and fees, find settlement the only rational option. Because FOSS projects publish their code and commentary publicly, trolls can easily identify targets for frivolous litigation. That frivolous litigation—actual or merely threatened—may chill the lively discussions and resulting innovations that make FOSS software an invaluable public resource.

Third, the cost of litigation under the suggestion test may actually be higher for these projects because of the nature of FOSS development. FOSS development involves the (frequently ad hoc) collaboration of hundreds, even thousands of developers. These developers may reside in different countries, with little to no budget for researching literature and other prior art. Moreover, if the culture of software development tends to be informal, FOSS development is still more informal. FTC Report, *supra*, Chap. 3, at 54. Documentation is likely to take the form of emails or postings to internet message boards and newsgroups that are much more informal than traditional academic research or industry publications. While these communications may support a finding that many patents are obvious under this Court's

Graham test, they may not contain the "magic words" required by the Federal Circuit to satisfy the suggestion test. The limited applicability of such documentation is ironic, given that many FOSS developers are likely to be the quintessential "persons having ordinary skill in the art" (PHOSITAs) that Section 103 relies upon to determine obviousness. A return to the traditional *Graham* test would allow FOSS companies to take appropriate advantage of the PHOSITA networks from which FOSS software emerges and properly defend themselves on Section 103 grounds.

ARGUMENT

A. The Suggestion Test Undermines the Patent Bargain and This Court's Precedents

As the Court has repeatedly affirmed, patents are a "carefully crafted bargain for encouraging the creation and disclosure of new, useful and nonobvious advances in technology and design." *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 151 (1989); *Mazer v. Stein*, 347 U.S. 201, 219 (1954). (Intellectual Property Clause based on "conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors in 'Science and Useful Arts.'"); *Kendall v. Windsor*, 62 U.S. 322 (1858) ("the benefit to the public or the community at large was another and doubtless the primary object in granting and securing [the patent] monopoly"); *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 503 (1917) ("this court has consistently held that the primary purpose of our patent laws is not the creation of private fortunes for owners of patents but is 'to promote the progress of science and the useful arts'"); *Pfaff v. Wells Elecs. Inc.*, 525 U.S. 55, 63

(1998) ("the patent system represents a carefully crafted bargain" between the public and the inventor).

The success of this bargain rests, in part, on the principle that the strong protections of a patent should be reserved to important advances in human knowledge, *i.e.*, technological developments that are not already "within the public grasp, or so obvious that they readily could be. . . ." *Bonito Boats*, 489 U.S. at 156. This reservation is no more than common sense—obvious advances will be made anyway, without the additional incentives a patent provides, nor the social costs it imposes. Rebecca Eisenberg, *Obvious to Whom? Evaluating Inventions from the Perspective of the PHOSITA*, 19 BERKELEY TECH. L.J. 885, 886 (2004). Moreover, denying patent protection to obvious developments, however novel, helps accomplish the purpose of technological dissemination by encouraging competitors to build on a patented technology.

Recognizing as much, the drafters of the Patent Act provided that "a patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art ["PHOSITA"] to which said subject matter pertains." 35 U.S.C. § 103(a).

Interpreting this provision, this Court has long since set a high but reasonable standard for determining nonobviousness. In the seminal case of *Graham v. John Deere*, this Court held that nonobviousness must be evaluated in light of "the scope and content of the prior art . . . differences between the prior art and the claims at issue . . . and the level of ordinary skill in the pertinent art." *Graham*, 383 U.S. at 17. The Court also recognized the potential

relevance of the circumstances surrounding the origin of the subject matter sought to be patented such as "commercial success, long felt but unsolved needs, failure of others, etc." *Id.* at 17-18. This multi-factor test acknowledges the importance of evaluating obviousness on a case-by-case basis, with close attention to what a PHOSITA would have known or been able to easily surmise prior to developing the technology in question.

The Federal Circuit's suggestion test ignores the dictates of *Graham*, and the patent bargain itself, by setting the standard for patentability artificially low and ignoring the PHOSITA. According to the Federal Circuit, an invention cannot be found obvious unless a litigant can identify some "teaching, suggestion, or motivation" in the prior art that would have lead a PHOSITA to combine the prior art references to create the technology at issue. *See, e.g., In re Rouffet*, 149 F.3d 1350, 1355-56 (Fed. Cir. 1998); *Beckson Marine, Inc., v. NFM, Inc*, 292 F.3d 718, 728 (Fed. Cir. 2002). Under the Federal Circuit's reading of Section 103, even the simplest novel developments within ordinary grasp – no matter how obvious – can be patented unless someone, somewhere, was explicitly inspired to suggest those developments in written form. Small wonder that there is no suggestion in the Patent Act, *Graham* or any other case decided by this Court that such a test is required.

The irony of this rule is that the more obvious the improvement, the less likely one is to suggest it. In other words, if something is self-evident, why even mention it at all? Indeed, according to the Federal Circuit's test, one of the quintessential overreaching patents—George Selden's

patent on putting a gasoline engine on a chassis to make a car—might have been upheld, even though the basic invention covered by that claim was so obvious that many people worldwide thought of it independently as soon as gasoline engines were developed. *See* Robert Merges & John Duffy, *Patent Law and Policy: Cases and Materials* 644-46 (3D ED. 2002) (discussing Selden patent).

B. The Suggestion Test Helps Create Patent Thickets and Stifles Foss Development

The Federal Circuit's justification for the suggestion test, while pragmatic, is not only without basis in law but also threatens the purposes of the Patent Act, especially when applied to innovation in the FOSS industry.

The suggestion test simplifies the job of the courts in determining whether a defendant has an obviousness defense based on an explicitly documented suggestion; however, this ease comes at the expense of defendants, their customers, and the public in general. Under the suggestion test, the obviousness inquiry begins and ends with only the most well-papered prior art; it completely ignores the vast knowledge base and resources of the public and in specific, the PHOSITA. As a practical matter, this means litigants are denied access to one of the best resources available on the subject of what is publicly known or easily perceived.

Moreover, the suggestion test is particularly damaging to industries, like the software industry, that depend on incremental innovation and tend to be inhabited by practitioners who have neither the time nor the inclination

to publicly document their actual work, let alone all the obvious suggestions for next steps they might ponder. *See* FTC Report, *supra*, Executive Summary at 6 (footnote omitted): ("Much of th[e] thicket of overlapping patent rights results from the nature of the technology; computer hardware and software contain an incredibly large number of incremental innovations.") *see also* Margo A. Bagley, *Internet Business Model Patents: Obvious by Analogy*, 7 MICH. TELECOMM. & TECH. L. REV. 253, 279-80 (2000-2001) (documentary prior art less available with respect to software); Lawrence Lessig, *The Problem with Patents*, The Industry Standard, Apr. 23, 1999, www.lessig.org/content/standard/0,1902,4296,00.html (last visited Aug. 20, 2006) (same). Under the Federal Circuit's suggestion test, these companies are particularly vulnerable to exploitation by patent trolls because evidence of the obviousness of bogus software patents is hard to come by as per industry practice.

Such bogus patent threats can result in significant costs to businesses and ultimately to the public. Indeed, a questionable patent that claims a single routine in a software program may be asserted to hold up production of the entire software program. *See* FTC Report, Executive Summary at 6 ("In some industries, such as computer hardware and software, firms can require access to dozens, hundreds, or even thousands of patents to produce just one commercial product.")

Many in the software industry have responded to this problem by exacerbating it. On the theory that the best defense is a good offense, these companies file for their own questionable patents. *See id.* ("as more and more patents issue on incremental inventions, firms seek more and more patents

to have enough bargaining chips to obtain access to others' overlapping patents.") (footnote omitted); James Bessen & Robert Hunt, *An Empirical Look at Software Patents*, 47, Research on Innovation, Working Paper No. 03-17/R (2004) (developers have incentives to "over-patent" for strategic or defensive reasons in order to gain leverage in cross-licensing negotiations.). An arsenal of patents can serve as a strong deterrent to litigation, as potential litigants may fear a counterclaim.[7] Defendants may also simply settle, even if they believe the patent claim to be specious, in order to avoid the extraordinary costs of litigation.

FOSS projects have even fewer options to battle the patent problem. First, FOSS software is rarely patented, as few projects have either the legal budget to do so or the philosophical inclination to exclude others from enjoying the benefits of their innovation. In fact, the economic margins of many FOSS projects are so thin that the expensive legal costs associated with both acquiring or defending patents would, quite simply, put the projects out of business. Indeed, a concern for the social costs of intellectual property rights in software led, in part, to the development of the FOSS movement. *See generally* Yochai Benkler, *The Wealth of Networks: How Social Production Transforms Markets and Freedom* 64-66 (2006). Thus, by refusing to join in a race to the bottom, many FOSS projects have made themselves particularly vulnerable to bogus and hard-to-defend patent threats—an outcome that perverts the Constitutional purpose of the patent system: to promote knowledge and innovation.

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7. Patent Trolls, however, are not vulnerable to this strategy, as they have no viable products or services to target or enjoin.

FOSS projects do have an alternative natural resource: the skills and knowledge base of the peer communities that collaborated to develop the software in question. By substituting its suggestion test for the practical judgment of a PHOSITA as the touchstone of the obviousness inquiry, the Federal Circuit deprives FOSS projects of the ability to make full use of that resource.[8] Moreover, it downplays what could be crucial and easily gathered documentary evidence of obviousness: the emails and newsgroups posts generated in the process of FOSS software development. Unless those documents contain an explicit suggestion to combine – something much more common in academic papers and industry publications than informal emails – they can do little to cut litigation short.

C. The Traditional Graham Test Is Better Suited to Assessing the Obviousness of Software Innovations

The *Graham* test is well-suited to assess obviousness in the software development context, given the relative lack of easily-accessible documentation of prior art, the incremental nature of software development, and the rapidly evolving level of skill of ordinary software developers. In particular, it can help avoid "patent thickets"; with a rigorous nonobviousness standard in place, there is no need to "patent modest incremental advances for fear of being foreclosed by

8. In fact, the USPTO and several of the largest patent portfolio holders have recently announced support for a new collaborative project to subject published patent applications to "community peer review" using many of the peer research and problem solving techniques pioneered in FOSS projects. *See* CNNMoney.com, *Patent Review Goes Wiki*, http://money.cnn.com/magazines/fortune/fortune_archive/2006/08/21/8383639/ (last visited Aug. 20, 2006); http://dotank.nyls.edu/communitypatent/ (last visited Aug. 20, 2006).

the patents of others from doing what comes easily to [one's] own scientists and engineers." Eisenberg, *supra*, at 886-87. Moreover, it provides room for software companies, including FOSS projects, to use a crucial natural resource: the "judgment, intuition and tacit knowledge of ordinary practitioners in the field that cannot be documented in the written record . . . particularly in fields of industrial technology that offer few incentives to publish." *Id.* at 888.

Equally importantly, the *Graham* factors allow appropriate consideration of the social context of FOSS software development. Because FOSS software develops through the informal collaboration of hundreds or thousands of people, in multiple locations, it is not only rare to identify a single piece of prior art that might suggest a given incremental innovation (if such prior art exists), but also the collaboration itself is likely to give rise to the "tacit knowledge" that actually spurred the given innovation. In other words, the real standard for what is obvious in a given situation may be held collectively by a group of FOSS developers who share a broad knowledge base instead of a mythical "lone inventor" who documents every thought in his or her personal lab notebook. And, because FOSS communities innovate collaboratively, they may be even less likely to publicly publish their innovations in written "suggestive" form. In this context, reliance on suggestion test is particularly detrimental. For FOSS projects, the best way to establish whether a given development was obvious may be to consult the community of PHOSITAs that evaluated the software in question, not look to an explicit academic or industry publication by a single individual.

Finally, the *Graham* test provides room for appropriate use of the one form of documentation that is most likely to be available in FOSS projects: email exchanges and blog or newsgroup posts that can show the level of skill in the art at the time of the purported invention. As discussed above, FOSS developers rely heavily on internet-based communication, such as email and newsgroups, to share knowledge and work collaboratively. The documents may be archived and, if so, can be used to understand the social context of a development and limit hindsight bias. Under the Federal Circuit's test, these valuable documents will be ignored unless they also reflect a suggestion to combine, thus prohibiting factfinders from duly considering legitimate evidence of obviousness in the software industry.

CONCLUSION

The Intellectual Property clause "is both a grant of power and a limitation" that "is limited to the promotion of advances in the 'useful arts.' " *Graham* 383 U.S. at 5. Therefore, as this Court noted, Congress may not "enlarge the patent monopoly without regard to the innovation, advancement or social benefit gained thereby. . . . This is the standard expressed in the Constitution and it may not be ignored." *Id.*

FOSS projects provide extraordinary social benefits, without the "embarrassment" of a patent monopoly. It complements and extends the Constitutional goals of the patent system by encouraging the American spirit of inventiveness and entrepreneurship. In keeping with the motivating spirit behind the Constitution, this Court should apply an obviousness standard that fosters the growth of this new industry, not the growth of patent thickets that hem it in. For this reason, among the many others articulated by KSR and its numerous supporting amici, EFF urges this Court to reaffirm the traditional *Graham* test.

Respectfully submitted,

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